# NBC NEWS - STS 41-D PAD ABORT (6-26-1984)

https://www.youtube.com/watch?v=WRpt17AYI9c (https://www.youtube.com/watch?v=WRpt17AYI9c)

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From June 26th, 1984 NBC NEWS coverage of the aborted launch of Space Shuttle Discovery. This was to be the 12th Space Shuttle Launch and the madden flight of Discovery. The launch was aborted at T-6 Seconds at 8:43 A.M E.T

STS-41-D Crew:

Commander: Henry W. Hartsfield Jr.
Pilot: Michael L. Coats
Mission Specialist 1: Richard M. Mullane
Mission Specialist 2: Steven A. Hawley
Mission Specialist 3: Judith A. Resnik
Payload Specialist 1:Charles D. Walker

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and all systems are go we get the latest from peter van sant peter kennedy space center and the the feeling now is very optimistic that we will have a launch at 8 43 eastern time the fog has been burning off it was a thick soup here not long ago that soup has now turned in more of a broth and it'll look more like water here before long as the sun continues to rise warm up and and burn off all of this fog astronaut john young has been making flying approaches uh to to make sure that the the fog is lifted to the point where if the shuttle had to make an emergency landing here they could see the landing strip and make a safe landing uh the situation there is is excellent also we have gone beyond the point where we had that computer breakdown yesterday which means that the new backup computer is working just fine and the extended launch window is such that we have until 1008 this morning should they decide to to hold on uh for discovery to be launched right now the count has been restarted we are at t-minus eight minutes 50 seconds and counting down and we shall return if we have a launch okay peter and we head back over to steve baskerville the countdown clock at cape canaveral says we have just about five minutes left before discovery lifts off on its maiden voyage into space joining us now from the cape our science correspondent bob bozell he's been there all morning and lending us his expertise is nasa astronaut lauren schreiber good morning again to both of you bob when last we checked with you we were coming out of that hole at nine minutes you might tell us again why that hold is there well that hold is there so that the test director bob seek can pull all the engineers and technicians and make sure everything alright is all right he took that pull everything including the weather which was a major concern all morning is all right the fog is burned off and we're counting down they've taken back the orbiter access arm which is the way the astronauts get in they can bring them back in about 15 seconds if there's a problem with me

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15 seconds if there's a problem with me is as you said warren schreiber our resident astronaut what are they thinking out there right now with just about four minutes to go well obviously after yesterday uh i think the uh they're looking forward to going this morning uh almost on cue the weather's cleared up a little hazy yet but uh looks looks very good right now the one of the things that's interesting about this mission is steve hawley the mission specialist is sitting here between pilot coaching commander hartsfield they call that the flight

engineers position uh you're a pilot the the mission specialist who's sitting back there kind of helps out what's interesting about that is that his wife sally ryan did that on the uh seventh person that's right she did and what is this function he's looking at the dials right now he helps uh out in both roles uh he helps the commander monitor the navigation and guidance and he also helps the pilot monitor uh systems performance we should mention that something called the apus or auxiliary power units have been started that sounds a little technical but it's very important those are the things that guide the rockets the directions uh of them as a during ascent and they are working fine everything else is working fine we see a picture there of the exhaust what is that exhaust from uh that's a purge that goes through the main engines just prior to start and they go through a chill down process and uh just preparing them to start now one of the crucial parts we always point this out is a t minus 31 seconds when we get there that's when the onboard computers take over and at that point the shuttle is essentially on its own the engines are started and the thing takes off without any help from the ground that's exactly right 31 seconds is another critical point so that's actually the next critical point isn't it now we're going through a lot of checks at the moment what other things are they checking these last few minutes well the after the hydraulic power is up to full pressure they check out the arrow surfaces uh those would be used to help for relieving aerodynamic loads and they gimbal the main engine nozzles to make sure those are working properly now that we have a second and counting

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the big tank uh vent arm being retracted and they'll move that out of the way to clear the way for a clean lift off now during the last uh two minutes here i think what we'll do is listen to the voice of nasa control and today that is mark hess and here we go we're on two minutes and counting to lift off the maiden voyage of the first minute 57 seconds and counting liquid hydrogen replenish has been terminated lh2 pressurization to flight level now underway vehicle is now isolated from ground loading equipment less than two minutes away now from the liftoff of 41d and its six-man crew the t-minus one minute mark the ground launch sequencer will verify that shuttle main engines are ready to start [Music] t-minus one minute 30 seconds and counting [Music] liquid hydrogen tank now reported at flight pressure minus one minute ten seconds and counting [Music] coming up on t minus one minute and counting sound suppression system now armed free liftoff order will be released at t minus 16 seconds t minus 48 seconds and counting srb flight instrumentation recorder is going to record t minus 40 seconds and counting external tank heaters turned off in preparation for launch [Music] t minus 31 seconds we have a go for auto sequence start discovery's four redundant computers now taking over primary control of critical vehicle functions through liftoff

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t-minus 15 seconds and counting we have a go for main engine start seven six five we have main engine start we have a cut off we do not know yet let's take a look at the launch pad first of all warren is there any danger to the astronauts out there the engines started and they went off what will happen next well the automatic sequencer that started at 31 seconds is also what cut off the engines for as yet an unknown reason but it also goes through automatic safing sequences so i don't believe there's any uh real danger out there no they did not show engine start on engine number one that means the engine failed to work properly that's correct uh if if all three engines don't come up to 90 operating pressure in the proper amount of time though now they'll be bringing the orbiter arm back to evacuate the astronauts as quickly as possible here there is a danger of explosion at this point is there not i i don't think there's any danger of exploding it as i say the automatic sequencer will take care of safing the uh the various propulsion valves and uh and the uh actually the safety sequence takes place in a very uh controlled manner the discovery is sitting out there on the launch pad the engines did not start something happened at t minus four seconds four seconds to launch we had one of we did have the uh we did hear engine start there was some ignition some firing of the engine i believe what we heard was the first two engines starting of course there is a delay for the noise to reach us here but uh by that time uh the automatic sequencer had shut down here we see a picture of the cockpit the

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here we see a picture of the cockpit the six astronauts are still inside i repeat there seems to be no danger to them uh this is the closest we've ever come to launch i suspect of any vehicle not just the shuttle uh when it didn't work this is about as close as you can come without actually going [Music] nasa has announced that the vehicle has been put back in a safe configuration that means there is no danger now of the engines igniting that's true and those those are automatically programmed sequences uh taken care of by the onboard computers now we hear a rather calm conversation going on between the pilots [Music] to sum up again for those of you who might have joined us late we got to t minus four in the countdown this morning t-minus four the on-board computer had given the order for the engines to start the engines we see a fire now there is a fire coming out from uh the bottom of uh it looks like one of the engines there now there are rescue vehicles out there that will probably move into to try to put that fire out is that not correct uh that's that's true there are a number of different systems out there plus uh people standing by at the roadblocks to move out if it's necessary uh we're not exactly certain what will happen next at this point because the exact nature of the problem has not been determined bob correct we don't know exactly why the automatic sequencer shut down yes okay bob we're gonna come back to you in just a moment and we're gonna try to keep that picture up also from nasa but we've got uh roy neal standing by at the johnson space center in houston roy what are you hearing down there well very little that you're not hearing brian as a matter of fact the word here in houston right now is what in the world happened after all the discovery is a brand new spacecraft and in this case i can't remember the last time that we saw a main engine cut off uh going all the way back oh it would

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uh going all the way back oh it would take us all the way back into the gemini days it's been a long time since something like this occurred the main concern at first of course was the astronauts they seem to be in good shape but uh for a countdown to stop or a main engine to be cut off at this point indicates probably a loss of pressure somewhere in the system but uh nobody here is prepared to conjecture it's in the hands of launch control of the cape roy can you speculate at all about that uh that fire that we saw no i can't uh brian uh unfortunately here in houston we're seeing exactly what you're seeing i think we'd be foolish to try to second-guess nasa at this stage of the game they're in close we're at a distance would it be premature and i asked this of both you and bob to speculate that since we had cut off so close to launch that this will will force a postponement of uh of some time oh i think that's quite a fair statement of course it's a postponement of some time first they've got a flow first of all they've fired up all the systems they now have to reset all the way through secondly uh not only do they have to reset they also have to pinpoint the problem and in this case uh it could be something that might delay them for quite a long period of time bob how are we defining quite a long period of time roy and i'm not asking you to go out on a limb because as we said it's premature to speculate but what are we talking about a matter of days or a matter of weeks i'd say at least a matter of days brian go ahead bob i would say that in fact until they find out what this problem is the space shuttle program will have suffered a major setback nothing like this has ever happened in america's space program before and it's safe to say that and we're all thrilled that the astronauts were safe and it showed that the safety systems worked but that we just saw a near disaster if that engine had shut off uh a matter of seconds later and the uh shuttle was in the air it would have crashed or at least they would have had to try to make a return to the launch site here so we saw the systems work in a safe way and in a very fortunate way but i think that we saw we saw the closest in the american space program we've ever had to a very very

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program we've ever had to a very very serious problem i think there's another point that might be made there bob which is to say that the systems themselves worked thereby saving the astronauts and preventing the disaster the onboard systems turned things off at the right time in the launch sequence and uh so what we see here is all those safeguards that were built into the system all hard at work well that's absolutely true i think it's a testament to the uh redundancy of the safety systems that we have but for a moment there it uh looks like uh how are you scared uh no as a matter of fact uh i think the system performed exactly as it's designed to perform it may have seemed to other observers that there was a large element of danger but i really think just the opposite is true the automatic sequencer is designed both to count down and launched and it's also designed to take care of shaping what we're going to do now is we're going to replay the tape of the final seconds of the countdown and maybe as we look at this we could possibly get a better idea of what happened [Music] we have a cut off [Music] we have an abort by the on-board computers of the orbit of discovery yeah one of the things that's interesting about listening to that is the way that the astronauts on board as well as the ground controllers managed to stay calm throughout the hey bob what's the timetable now for getting the astronauts out of there uh the answer is i really don't know they've said that the engines are safe that there's no danger of explosion uh warren what what do you think's good uh i that's a very true statement everything has been safe the the automatic sequencer takes care of the main propulsion system that's followed very soon by the crew

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that's followed very soon by the crew performing some other safing actions and shutting down the hydraulic power units but it's pretty safe to say that nasa fishers want to get them out of there as soon as it's safe and the shuttle's been completely shut down well that's true what will occur now will be very similar to what happened yesterday after the decision to scrub was made we just carried a little bit further this time and got ignition but they'll go through uh similar recycle steps now we see in our live picture there that's the cockpit and the the three the two the pilot the commander and steve holley are sitting right behind that window we saw the other three downstairs what do you think it's like when you your adrenaline gets to be so high that you think the thing you're four seconds from going off and the thing goes uh well i'm sure that they uh the crew probably thought that they were going but uh they also have instruments of course in the cockpit that uh told them almost immediately that the engines had shut down so uh they're very well aware of what's happening bob let's go back to houston for a moment roy neal a little bit earlier we had a chance to talk i asked you if there was mass depression there yesterday following the postponement you said no what are they feeling this morning well i have no way knowing of the climbing inside their minds bryant but i think it's a fair assumption that uh there's a good deal of gloom and doing in looking at the people of mission control as you know they're the great stone faces we we never really get emotion from their faces but i think it's a fair surmise to say that they are not happy at this moment would you be no i think i think that's probably the understatement of the morning in fact the only questions remain to be seen is just how big a delay this causes and how major a setback this proves to be not only for nasa but also for the shuttle program that had been uh going so well being made in flight of discovery seeming to have continued problems yesterday a postponement with an onboard computer forced a delay of 24 hours this morning as you saw on abort by the

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this morning as you saw on abort by the onboard computer at four seconds t minus four seconds till launch time bob you never saw it go that far down did you nobody has ever seen it go that far down because we were saying one of the things is this is something that's never happened in the american space program ever that has gotten that close to launch and for the engines one of the engines actually seem to be starting from the picture warren schreiber it's it's that seemed to be the case yes we had uh well i think two engines started uh apparently one engine did not start and that's why the whole sequence was cut off and the uh now the fire we just had an announcement from the uh site that the fire detectors are on and they're not detecting any further fire i mean there was very obviously was flame there for a while but i suspect that there are onboard fire dampers is that what happened there are systems on board the mobile launch platform that would uh uh help take care of any natural island ryan this is roy neal in houston can i interrupt go ahead roy please i was just looking back through some of the records and i had mentioned gemini earlier there was a similar situation to this one back in the gemini days this was wally sharon tom stafford flying back with gemini uh six and at that time the launch vehicles engines automatically shut down 1.2 seconds after ignition they did of course after that uh take off and uh managed to successfully recoup the problem but this has happened once before a long time ago back in the germany days there's another point in time let me take care of a little business here in new york gentlemen and that is to alert all our stations along the line that we will be extending beyond nine o'clock and we will not be breaking away uh four messages or a station break at our normal intervals instead we will uh stay with our pictures that are coming from the cape and bob anything new to report uh no nothing new to report there's still uh six astronauts are still on board we want to repeat that they are safe there seems to be no danger we get a shot of the mission controllers they're looking at their monitors i think everybody's trying desperately to figure out what

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trying desperately to figure out what happened and as soon as we know more we'll be back with you brian bob it was enough to say that that abort was done by the on-board computers in in layman's term what is that what does that mean that the computers take over the launch and are in fact in charge of it and detect what goes wrong before anything else absolutely right starting at t minus 31 seconds the ground controllers no longer are in charge the computer on board decides what to do and what sequence the rocket should be fired it was the on-board computer which detected the problem that one of the engines apparently wasn't firing and it stopped it at t-minus four seconds is that the same type of computer that we experienced a malfunction with yesterday one of the backup systems oh it's well not the backup system it is the shuttle's main computers and that's the reason uh in fact why they had to replace the computer yesterday because in fact uh these computers control almost everything on the shuttle and without them the shuttle can't fly safely and in fact it was one of the reasons why as you noted yesterday they did not want to go up there if there was any problem at all with any of those computers on board now we have a picture uh when they're they're shooting water at the engines this apparently is a to further eliminate the fire damage or to possibly put out any lingering fire that there was [Music] that's true and this is part of the on uh the mobile launch platform system that will uh help take care of anything like that that comes up so there was at least some danger of fire we saw a flame so there had to be some fire although uh do you think there was any possibility that the fire could have spread obviously it didn't i don't i don't think so i think what we saw was some residual uh flame after the engine cut off bob i know you said they're safe the astronauts but the matter begs the question why don't they get them out because i think that they want to make sure that they're in charge of some of the controls up there to make sure that uh [Music] things are under control now they just announced that two fire

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now they just announced that two fire detectors on board the shuttle had detected there was a fire that's what can cause them to turn on that water the uh there we have another shot of the back since i don't know whether that's steam or smoke that's steam coming from now there's the rescue the uh you see the rescue sign that's the normal hatchway in which uh the astronauts will come out that shot indicates to us that the arm through which the astronauts will leave has been put back in place and i think it's uh space safe to say that the astronauts will be coming off sooner today than they did yesterday how long will it take to get them out bob well in a true emergency when nasa thinks there's a genuine danger they could get out of there in 20 or 30 seconds so obviously that decision was not made is that correct they can get out and very quickly if they need to i think everything again is very safe the water was a precautionary well we still they're still using it so obviously there's still some concern about fire if they're still keeping the water the fire hoses going on the engines i think they use that as as a precaution in this case now nasa is telling us that the fire sensors are still indicating that there is a fire on board [Music] bob i'm sorry could you repeat the fire sensors are [Music] there are fire sensors on board the shuttle which are indicating that there is still some small fire uh going on that's why they're keeping the water uh spraying on board we're watching this situation very closely and obviously resolution on why we got a cut off uh just four seconds away from uh ignition of the solid rocket boosters and liftoff of mission 41. now one of the reasons also that you haven't seen a lot of people go running up to theirs even though the astronauts are sitting up on top of that there are a lot of explosive power that's uh is dangerous and they don't want to put anybody else in jeopardy who might not be needed to be is that correct uh everything is planned out in a precise manner actually if the crew needed to they

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actually if the crew needed to they could get out they will make sure the whole system is very safe before they send any ground people in to open up the hatch gentlemen let me take care of business one more time again because we have just moved past the point where we usually did goodbye to our viewers along the east coast we are going to be staying on the air with the problem that has developed with the scheduled launch of discovery we have moved past our station break time we will be extending invite all our stations along the line and our viewers to stay tuned we'll keep bringing you this roy neal down in houston do you have anything you can add to us yeah i've been monitoring here listening to uh mark has to launch control he's been telling us that there were some small fires on the heat shield and that's why we've been seeing all that uh water being sprayed down in there not aboard the spacecraft but in the heat shield itself on the launch pad uh also as far as getting the people out they're in no rush at this stage of the game obviously they've got to uh take every precaution and before you want to put people up on that platform you want to make very sure that all those noxious gases are no longer there and that there's no further danger of fire so as we watch we'll have the best uh indication of all as to what's really going on bryant because we'll see when they stop playing games down on the heat shield area down on the aft end of that spacecraft then we'll see the people as they go up to unlock the hatch in about that time is when we can expect those astronauts to come out roy just a point of order that you might straighten out for us who's in charge right now of what's happening the folks in houston are those at the cape no those are the cape this is a launch control matter as a matter of fact you may remember the ground rule on that uh the main mission rule is uh the cape is in control until the spacecraft clears the launch pad okay bob bozell what's going on well we can see that the uh water has been turned off on the uh that was being sprayed on the heat shield on the bottom of the rocket we can see the mission controllers are still scanning their dials uh they keep announcing over and over again that

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keep announcing over and over again that they have no idea what the problem was it certainly could be the case that it will be a long time it'll take days hours weeks of investigation there goes those fire hoses again so they're still not satisfied that that fire in the vicinity of the bottom of the discovery has been put out and as roy said that that was a very good point that one of the reasons not to rush the astronauts out of there is that the uh there's a lot of noxious fumes that come when you start firing the engines and it might be more dangerous to walk out into a cloud of noxious fumes and to sit inside the cockpit when there's no danger warren is at the point that's true their environment inside is uh just as safe as anything outside at the moment and as i say if if necessary they can get out very quickly but right now they're just as well off to stay there and help save the vehicle bob and colonel shriver let me bring it back here for just a moment to try to update our viewers along the line exactly what has transpired with discovery this morning the launch was scheduled for 8 43 eastern time the big question mark this morning as we came on the air was the weather there was fog that was obscuring the pad at 39a but officials hope that the sun would burn that off as the morning progressed in fact it did and launch time looked good as the window was even extended to 1008 we got into the countdown but when we pick it up inside of one minute this is what happened we're going to re-rack the tape right now watch what happens minus 31 seconds we have a go for auto sequence start discovery's four redundant computers now taking over primary control of critical vehicle functions through liftoff t-minus 15 seconds and counting we have a go for main engine start seven six five we have main engine start we have a cut off we have an rsr

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we have a cut off we have an rsr we have a an abort by the onboard computers of the orbiter discovery you were listening to the voice of mark hess there and as you heard we had a cutoff there was an abort by the on-board computers at t-minus four seconds what appeared to be a failure of an engine and as bob bazel has already noted this morning the systems did work fine and cut off what could have been a disaster there was a fire below but as has been noted many times this morning the crew of six aboard in no danger again in no danger let's go back to the cave bob what's going on okay they're still shooting uh fire hoses at the bottom of the uh shuttle discovery there they're apparently not satisfied the fire detectors apparently are still indicating that there is some uh kind of problem down there with either it's overheating or fire we we saw flames right after the incident we saw flames that didn't belong there sprouting out and uh but we haven't seen them for a while although they've kept the fire hose what's going on is we've been listening to the conversations between the crew on board and the people in the launch control center they uh are in an orderly manner shutting down the systems is that correct orange driver yes they are and they have on the uh what they call the zero level which is right at the engine level different fire sensors and apparently they get intermittent indications that one of those sensors at least is telling them that it may be kind of hot down there so they take precaution and spray water hey bob we are aware that two of discovery's main engines have flown before one in columbia nine and another in challenger six seven eight there's really no way of telling which engine had the problem or you have not been alerted yet have you no we think it was engine number one but it's not it's not clear at all what happened at least i i think it's not even clear to nasa folks at certainly uh clear to us they just made it an official announcement that the launch was scrubbed for the day i don't think that's particularly a surprise to any of

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that's particularly a surprise to any of us i think this launch has been struck for a long time it's not exactly bulletin i think brian that it does bear repeating you've said it a few times i say it a few times uh what happened this morning we had a countdown to t minus four seconds at least one of the engines failed the onboard computers aborted the discovery did not take off and the most important thing the six astronauts aboard were apparently not harmed they are in no danger that we know of right now there seems to be some kind of fire or excess heat persisting now for a long time near the base of the discovery either it's on the launch platform or on the vehicle itself they've got fire hoses turned on that you can see those pictures right now but the astronauts are on board shutting down their systems i think pretty soon we'll be seeing them come off vehicle and it's safe to say that this mission of the shuttle discovery won't be flying for a while bob what remains to be done there on the pad i mean we've heard you say they've moved it into a safety configuration and they're in no rush to get the astronauts out of there and that there was some danger from the noxious fumes maybe you might ask colonel shriver to exactly take us through the timetable of what has to happen now well yeah there are several things colonel sharper exactly what has to happen now for them to get out of there are they in a rush together uh no it'll occur in a very early manner the launch control team here will drain the big external tank of the propellants and when all the pad area is determined clear and safe then the ground support people will go back up and help open the hatch [Music] excuse me brian they're going to turn off those fire hoses again i think in a minute to take another close look uh probably with tv cameras and we'll be able to see so they get an idea of whether there's still a problem down there we can try ken marty's asking can we get a guest uh the now we see a little bit of steam coming down from the bottom there that we repeat is not a that's not a fire that's just the normal steam vent coming out from the fuel on board

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fuel on board uh roy neal who covered the space program a good deal longer than i have uh corrected me that there was once on a gemini flight a an incident where it went to one uh closer to one second than this did but this certainly in the shuttle program was the closest we've ever come to a to a launch uh that that's gonna not have not happened and uh i think it also bears repeating that the systems did work very well they shut down and uh tell me what would have happened and we repeat to the viewers that what we're saying here is completely hypothetical but what would have happened if that engine had failed another 10 pounds well if it fails right at liftoff or within the first few minutes of flight we would be in a return to launch site mode which means that the the whole vehicle would turn around downrange and fly back toward kennedy and land on the runway okay well they would have tried to land on the runway we just heard that the people in launch control here after examining that fire situation at the bottom of the discovery have determined that the fire is out that it's clear and it is safe to take the crew out i think that's our first clue as to why the crew didn't come out right away is that i think that there was concern about fire danger the nasa launch director just gave the word that it appeared to him that the fire was out and that he gave a go for the crew to egress that is to come out of the launch vehicle i think pretty soon we'll be seeing the six astronauts coming out of the discovery bob did they also tell you what the fire was precisely no i haven't heard exactly what the fire was uh the there are several detectors is that correct uh kernels they're all over the place there are sensors and detectors uh for gases and for fire and uh apparently they had some on the bottom level there who were that were giving positive indication now to uh doesn't necessarily mean there was a fire but yeah it could mean overheating or if the engine uh burned through those uh could have shortened as you asked colonel shriver there what

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as you asked colonel shriver there what would have happened if it had failed i'll say five seconds into launch he used the term we would have tried to execute a return to launch site mode in plain english would that thing have oppressed uh we don't know because nobody's ever tried it what they would have tried to do is get rid of the external that huge orange external tank get rid of the solid rocket boosters dump them in the ocean over across the atlantic ocean there and then fly the thing like a glider back to the runway which is about three miles from here which looks great on paper but boy i don't think you would want to be the problem and which as you noted this morning was going to simulate that condition after time in our training of course we have never done the real thing we like to have confidence that everything would have worked properly though that's right now what's going to happen next is that a group of people called the closeout crew who will come up and open the hatch and allow the astronauts to come out will be coming into the area one of the reasons for the delay also was that they wanted to make sure that the area was safe with those fire detectors still indicating a problem they didn't want a bunch of people to rush in there with millions of pounds of explosive fuel in the area again we see a shot of the launch control center there's another shot at the bottom of the discovery with the engines where the problem was right let's go back for a moment if we could to houston and roy neal are you still with us yes i am indeed well you used the term a little bit earlier for the nasa officials the great stone faces are they showing any change yet no as a matter of fact a few moments ago uh there was no reaction at all when mark hess in firing control said well there's nothing further to report from here in launch control so we're going to close down our commentary from here uh there are a number of things that have to happen before we'll have anything further to report and the mission control they took it rolled over one time and we asked can

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rolled over one time and we asked can any of you people break loose to come over and talk with us and tell us what your feelings really are they said not till after the crew come out of the spacecraft another point roy a little bit earlier when when you and i were talking i asked you at what cost had uh the launch been delayed and you said well there was considerable cost of postponing it 24 hours now there's going to be even more what do these delays cost can you can you even put a dollar figure on it on a daily basis well it's very hard to do brian because when you look at a postponement of this kind first of all we don't even know how long the postponement we don't know how much it will take to make a fix to get things working again but normally you can figure that you're looking at something in the range of about a million dollars a day but that's that's chewed up in salaries for people who are on the payroll anyway it's kind of like saying if the today show were to postpone for 24 hours how much would it cost yeah we'd still end up paying some people and others we'd wind up saving on i guess so one thing more though um we we were told a few minutes ago by firing control and this is an important point that they can't go into troubleshoot until they get all of the liquid out of the external tank meaning all the liquid oxygen and all the liquid hydrogen that drainage will take some time so i suspect it's going to be quite a few hours before we find out what really happened this morning because crews can't go in to inspect the damage and see what uh what caused the problem okay right well you've been listening i know bob and colonel shriver have been listening on to nasa control what's the latest gentleman uh the latest is that the launch control just gave the astronauts the order that they will have a normal egress that is they're not going to rush out they're not going to come down the slide emergency wire so apparently they feel that whatever fire or explosive danger there was before it certainly no longer exists i think again for people who are just joining us it's not a bad idea to keep recapping what happens there was no danger to the astronauts but the countdown for the maiden voyage of the discovery did get to t minus four seconds this morning and at that point uh the onboard

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and at that point uh the onboard computer aborted said no way you can't take off and the reason for that was because one of the engines had failed after that happened we saw some flames shooting up around the area there were indications from the shovels fire safety devices that there was either a fire or an escape of noxious fumes they turned automatic fire hoses on they were at the bottom of the engines and kept those on for a long time until the people in launch control were convinced that there was no danger since that time the crew has been shutting down all the systems on board and what will happen next is that we will see the six-person crew commander hank hartzfield and his five fellow crew members including judy resnick who was to have been america's second woman to go into space uh they'll be coming out in a bit and we'll get a look at what their expressions on their face when they do i suspect it'll be about five or ten more minutes at least until they come out then they'll go back they'll be driven in their van it's called the astro van and they're taken back to their crew quarters i suspect for a very thorough debriefing about what they saw and heard uh and felt uh during those final seconds when the mission was finally aborted right again let's tell all those alert all our stations along the line that we are continuing past our normal cut-off time with the live pictures from nasa on the fate of the discovery shuttle as you noted bob an aborted launch this morning maybe it's worth going back to a tape replay one more time our problem all along had been with the weather but the weather cleared and at 8 42 we moved inside of t minus one and counting and the countdown appeared to be going well we pick it up again the voice belongs to marquess of nasa control sequence start discoveries four redundant computers now taking over primary control of critical vehicle functions through liftoff t-minus 15 seconds and counting we have a go for main engine start 7 6

00:38:01 (https://www.youtube.com/watch?v=WRpt17AYI9c&t=2281s)

we have a go for main engine start 7 6 5. we have main engine start we have a cut off [Music] we have a an abort by the on-board computers of the orbiter discovery this is shuttle control we will not stop commentary and we'll continue to update the status of egress operations and safety and configuration of the vehicle as there is our things to report so as you can see we are continuing to keep you updated on the progress being made out of the launch pad this morning and that will come up periodically with the updates as events are occurring the last status that we had we are initiating draining of the liquid oxygen tank on the e.t and we have been given a go to egress the flight crew so the closeout crew is on their way to the launch pad to begin preparation so that the 41d flight crew can leave it as we just heard from nasa control two things number one the fire is out and number two they have already alerted the folks to go ahead and get the six person crew out of the shuttle the crew is already enroute to take them out of there we're looking at the launch pad now live pictures bob buzzell you're still with us yeah i certainly am brian one of the things that's interesting i think that now that the crew is safe and we know that the situation wasn't a disaster although it may have well come close to being one it's interesting to speculate what this will do for the future of the space program we don't know what this problem was there nasa has been way behind in the shuttle program from what its original plans have been all along and i would think colonel schreiber that it's safe to say this is the last thing that you think you needed right now uh but the uh this there have been some problems with rockets that take satellites into higher orbits already and because of that this mission was only 70 percent full of what the load that it was supposed to be taking because one of the rockets for one of the satellites hadn't been tested properly but what do you think this is going to

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but what do you think this is going to do for the future of the program well obviously we would rather this hadn't happened but uh i think what what will happen now is all the engineers and technicians will sit down with what data they have and try to decide exactly what happened and if the engine did not ignite properly as to why it didn't and then they'll take whatever corrective action they need and i think we'll be back looking at another launch date very quickly now one of one of the things what do you think is going through commander hartsfield he's been up before what uh what's you're thinking about right now well i think what he is trying to think about right now is cooperate with the ground team and making sure the vehicle is safe he's monitoring the status of this recycle he and the other members of the crew have done their uh switches to make everything inside as safe as they can and they'll just wait now and and try to discuss i imagine there'll be some talk inside about what the options will be and uh and uh probably wondering why the engine didn't fire just like everyone else now one of the things that's interesting to me about this uh bryant and that colonel schreiber is that we've talked a lot about the shuttle becoming an operational system after the fifth flight they said it was an operational system now this was a new vehicle but the system supposedly had been tested very thoroughly but i think that this shows that this thing isn't quite operational yet i mean plane airplanes don't work sometimes but they don't fail with the kind of frequency that we see problems here a computer problem yesterday which was serious but was certainly minor compared to what we saw today i think is it safe to say that we still have a long way to go uh colonel before we see the shovels being routine fights like airplanes taken off like has been predicted i think it's fair to say that a system is uh complicated as the shuttle is and it is the most complicated space vehicle we've ever built

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ever built we'll have some growing pains it'll take a while to now if we should if we switch to the national pictures for a moment can we do that in new york okay we can't do that we have some uh what's happening right now bob let me as we're having a bit of a problem with the cameras uh from nasa now let me just alert all the folks along the line that if it seems like we're stabbing in the dark here we are because nasa officials themselves don't know what happened right why it happened or when it might happen again we're looking at the hatch there it appears they are getting set that's right to take the astronauts out that is the what's called the white room that's uh we can now watch the technicians and begin to open the door to allow the crew to come out i think also from having watched this kind of scene before i think it's safe to say that these people are working quite a bit faster than they usually do i think everybody wants to get the crew out of there as quickly as they can that chatter that you hear in the background is still the flight crew on board talking to ground controllers about the various systems continuing to shut things down continuing the monitors back in the white room out at the launch pad and they will as soon as they have access to open the hatch so that the flight group can get out of discovery uh launch director bob seek in discussions with gene thomas our shuttle projects engineer has basically said that he wants him to continue with the safing sequences and then as soon as he can uh we'll expect to get some words on what the preliminary indications of the problem uh what those were as far as what caused us to abort the launch of mission 41d this morning no no word on that at this point the safe being is continuing preparations for getting the flight crew out of the vehicle underway at this time with the closeout crew back in the white room and what that was just uh bryant that was the voice of mark hess in mission control he's the

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mark hess in mission control he's the man who was counting down backwards and stopped counting very abruptly at t minus four a little while ago when the maiden voyage of the discovery was aborted because apparently of a failure of at least one of the engines to fire properly but stop counting very calmly we might add i must say i'm impressed with those people and their ability to maintain their cool i think that uh colonel shriver who's with me here is a test pilot and those of us who've either read or seen the right stuff know that one of the things that these folks are trained is to remain calm in all situations and i sure got excited when that thing stopped but you didn't seem to get too excited why not i think it's a great testimony to the professional uh core of people we have not only here to keep it all over the nasa system to you know they train they train for these types of things they it's not it's not a surprise uh to be able to react to emergency situations we try to train as much as we can to take care of any contingencies well they took care of it well enough certainly to make sure that everybody was safe this morning what we see now on our pictures the closeout crew those are nasa employees or nasa contractors are putting in a series of all here comes there's judy resnick just came out she walked by very quickly uh certainly didn't pause to say hello to everybody let's see who else comes out we'll be watching the man in the nasa suit he's an astronaut isn't that yes that's true that's uh mike smith but he was not on board he's part of the closest part of the closeout crew that return let's see who else we have coming out taking their helmets out first i can't see who that is because of the helmet the shuttle control well we're beginning now the egress of the flight crew judy resnick being the first member of the walker out of the vehicle steve holland steve hawley charlie walker mission specialist steve hawley being the third member of the crew out of the vehicle

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we have three more members uh the other christian specialist who is up on the flight deck uh with commander and pilots uh getting out now mike mullaney mike commander and pilot mike coats and uh hank hartsville i think the thing to note is that they're not uptight everybody's doing what they're supposed to do and the situations we're all controlled now we have one more to come is that correct i think we've seen i think uh both my coach and tank need to come out so the pilot and the commander since they sit up front they'll be the last to come out that's true right go to the test conductor a little while ago requested they go ahead and send the astronauts into the pad pick up the flight crew we would expect that they'll return to the uh operations and checkout building bob as we wait on on the commander and pilot maybe you can tell me i'm sitting here with some wire copy and spokesman terry white at mission control is saying there was no start on engine number one is there any way of telling whether that was one of the new engines or whether it was one that came from columbia or challenger uh was the engine number one i'm going to ask the colonel's driver this question was engine number one the new the one the new one or the one that came from uh columbia challenger uh i don't recall at the moment which one uh was changed out after the frf uh then we have uh commander henry hartsfield yeah he actually seems to have a smile on his face he doesn't seem to be terribly upset like we're still waiting on mike coats stretching out i guess he was a little bit tense there for a moment he's stretching his muscles out i suspect

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stretching his muscles out i suspect that it wasn't all as easy as it sounded well and also uh recall that they've they've been out there some uh three to three and a half hours now and they do lay on their backs so it's kind of uh refreshing to get up and stand up and walk around but it certainly isn't as refreshing as anybody to have been with it floating around in space right now right now that's true by now they would have gone past the homes one burn and that would be well on their way to uh here comes the helmet of the mike coach the pilot i suspect we'll be seeing him in just a moment now and here he comes the last crew member is now out of the discovery the last member of the flight crew now leaving the orbiter mike coats pilot okay bob now that mike coats and and the other five are out i'm gonna take it back uh from you gentlemen with a big thanks we're gonna try to do a recap here the shuttle engines the shuttle has three main engines are designed to fire eight seconds before liftoff enabling the ship to build up thrust before it is uh thrown into space in this case one of the engines had a no start that's the word from nasa control there was a no start on engine number one at this time there is no way of telling whether engine number one is in fact the one new engine on discovery but whether it was one from colombia or challenger what we're looking at here is a replay of the countdown the voice belongs to marquess here's what happens when they were inside of 31 seconds t-minus 15 seconds and counting [Music] we have a go for main engine start seven six five we have main engine start we have a cut off we have an rsr we have a an abort by the onboard computers of the orbiter discovery

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you were looking at the replay there of what happened back at 8 43 this morning eastern time it took a good 40 minutes to get the crew of six out of the shuttle but the nasa folks seem to know hurry there was a bit of concern early on following the abort by the onboard computers when the fire detectors on board the shuttle detected a bit of a flame down below so far it is tough to tell what that flame was what caused it but it was quickly doused and the nasa officials again seemed to no hurry to get the crew of six out the crew of six now out of the shuttle they are safe and the folks in uh at nasa well it's left to them to determine what went wrong one final check with roy neal down at the johnson space center roy yes here's some late word for mission control they pinned the problem down to a failure to start on engine number one they think that will be easily resolved they also say it will take at least two to three days to turn around because of course they started things such as the auxiliary power units and it does take at least that amount of time before they can fly again they say easily resolved but still a very major setback to the shuttle program roy i'm sorry what was your question i said they said easily resolved but still a major setback to the shuttle program well i think that remains to be seen if they launch in two or three days it's not a major setback it becomes then something that uh the systems worked and they managed to overcome difficulty and no harm done no harm no foul okay well it remains to be seen the nasa folks right now are saying they'll at least be a postponement of 48 hours we'll have to watch along with you to see if it goes any farther than that but the crew of six it's safe discovery will not fly today again the problem in engine number one for those of you along the east coast we invite you to stay tuned to your local station for updates later in the day for the rest of you we'll be coming back in just a moment right after station break

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